type, and cannot be confounded with any others of the same size.

Dimensions: 41×29 ; 41×29 ·1; $41 \cdot 4 \times 28 \cdot 5$; $41 \cdot 4 \times 29$ mm.

Weights: 89; 92.5; 93; 97 centigrams.

Lenhöfda, Sweden, December 1st, 1904.

IX.—An Ornithological Excursion to the Victoria Falls of the Zambesi. By W. L. SCLATER, Director of the South-African Museum.

The recent opening of the railway between Bulawayo and the Victoria Falls on the Upper Zambesi has rendered a visit to what is, without doubt, the most remarkable natural phenomenon in Africa, if not in the whole worid, an easy matter, and one which can be undertaken in comparative comfort and at a fairly reasonable cost.

Having just completed the manuscript of the fourth and last volume of the 'Birds of South Africa,' I felt that I was entitled to take a short holiday, and decided to visit the Falls, and at the same time to make some additions to the collections of the South-African Museum from that district.

As is well known, the first European who saw the great Falls of the Zambesi was David Livingstone. On his fourth journey from the south in 1852 he first met the upper waters of the Zambesi at Sesheke, some sixty miles above them. Thence he went right through to the Atlantie coast of Angola at St. Paul de Loanda. Returning from Loanda in 1855 he left Sesheke on the 3rd of November to descend the Zambesi to its mouth. He stopped at the Island of Kalai, about thirty miles down the river, and from this point made an excursion still further down in a small canoe. He landed on an island at the lip of the fall itself, where he made a little garden and carved his initials on the trunk of a tree. On this island, now called "Livingstone Island," can still be seen the identical tree, and indistinct traces of the "L" which he carved on it in November, 1855 *.

* See his 'Missionary Travels,' p. 525.

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Although since this discovery a number of travellers have visited the Falls, such as Chapman, Baines, Baldwin, Sclous, Holub, Oates, and Mohr, very few have done any zoological collecting in the neighbourhood. Indeed, with the exception of Dr. Bradshaw, who resided in the neighbourhood for several years, no one seems to have collected systematically on the Upper Zambesi at all*. The collections of Sir John Kirk, who accompanied Livingstone on his second journey in 1862-3, and of Captain Alexander. who ascended the river from its mouth as far as its confluence with the Kafue, were made chiefly along the lower reaches. Unfortunately Dr. Bradshaw's collection was dispersed at the time of his death, and no complete account of it has ever been published. My own excursion was far too short to obtain anything but a general view of the bird-life of the Upper Zambesi, but I think that a few notes of what I saw and a list of the birds that I brought back may be of interest to my fellow-members of the B. O. U.

Accompanied by my wife and the taxidermist of the S. A. Museum, I left Cape Town on Wednesday morning the 31st of August, and reached Bulawayo in the early morning of the 3rd of September. Leaving again in the evening, we arrived in time for dinner at the Victoria Falls Hotel on the 4th of September, the whole journey occupying five and a half days. Little bird-life was seen on the way up; but a pair of Lanners (Falco biarmicus) was observed perched on the telegraph-wire near Touws River on the first day. Near Gaberones, in the Bechuanaland Protectorate, where the country becomes more interesting and picturesque, with kopjes and forest of a thin and shadeless character, several birds could be distinguished from the carriage-windows. Perched on the branches of the thorns (Acacia), which were just beginning to get green, were seen examples of two species of Rollers (Coracias caudatus and C. mossambicns), while small parties of Yellow-billed Hornbills (Lophoceros

^{* &}quot;Victoria Falls" is one of the localities mentioned in Dr. Sharpe's Appendix to Oates's 'Matabeleland,' but very few specimens seem to have been obtained there.

epirhinus) flew from tree to tree with their characteristic undulating flight, the long tail waving behind. One of the commonest of the birds in this district is the "Go-away-bird" (Schizorhis concolor), with its plain grey dress and fine crest, which it keeps elevating and depressing as it rests on a branch. Its loud ery, always exactly resembling its name, is uttered in a most curious querulous tone. We did not, of course, hear it on this occasion, but we had ample opportunity of making its acquaintance later. Other birds easily recognised were the Long-tailed Shrike (Urolestes melanoleucus), the White-erowned Shrike (Eurocephalus anguitimens), and the large Drongo (Dicrurus ater), easily distinguished by its forked tail. At Mahalapve, in the Protectorate, I was fortunate enough to light upon a fine example of a "Gom Paauw" (Otis kori), just brought into the station by a native, and to seemre its skin for the Museum. Although by no means a rare bird in some parts of the country, it is never easy to obtain specimens, as it is excellent cating and is always destined for the cooking-pot.

At Bulawayo, where we spent the day, the only birds about the town were a number of Pied Crows (*Corvus scapulatus*), which probably act as seavengers. I have never seen Crows about any other South-African town, nor anywhere in such numbers.

Between Bulawayo and the Fails the country is decidedly hilly, and the work on the line here was very heavy, the whole district being covered with a thin forest, chiefly of Mopami and Teak; it is also excessively dry and waterless. In addition to the birds already observed, I recognised here only a small Dove, with its wings rich rufous underneath (*Haplopelia larvata*) and a Bateleur Eagle (*Helotarsus ecaudatus*) soaring high up in the sky, with its excessively short tail and its head bent down towards the ground, searching for a meal.

On arriving at the Falls we stayed for three days at the temporary hotel at the present terminus of the railway, about half a mile from the Falls themselves, spending our time chiefly in viewing them from different points and in taking photographs. Birds were not so numerous as I expected them to be, either on the river itself or in the bush and scrub along the banks.

The first morning I saw a pair of the "Berg Gans" (*Chenalopex ægyptiacus*) standing on a rock just above the Falls themselves, while River-Duikers (*Phaluerocorax africanus*) and Snake-birds (*Plotus levuillanti*) could be observed at all times and in all sorts of places along the river, both of them generally sitting motionless and upright on a projecting rock, and only moving off in a leisurely manner when approached quite elosely.

Kingfishers, as might be expected, are very numerous on the Zambesi, both as regards individuals and species; the smaller Black-and-White Kingfisher (*Ceryle rudis*) is perhaps the most common, but the larger (*C. maxima*) is by no means rare, and it is a beautiful sight to see it poised in the air, with its head and beak pointed directly downwards and its wings vibrating rapidly, before making a dash on the unsuspecting fish below.

Flying around the actual Falls, in and out of the clouds of rising spray, was a pair of Hawks, which, however, I was never able to identify satisfactorily, also a number of small Swallows with white under-parts; these, I believe, were *Hirundo dimidiata*, the Pearl-breasted Swallow, but 1 was unable to secure an example, and consequently could not be quite certain. Playing about the rocks at the Falls, too, were several pairs of the handsome black-and-white Wagtail (*Motacilla vidua*) which were running up and down and taking short flights in search of insects and grubs.

In the so-called "Rain-Forest," and in the bush around the Falls and along the banks of the river above, were a good many small birds. The Three-streaked Bush-Shrike (*Telephonus australis*), noticeable for its clear melodious whistle, sat very tamely on the branches of the bare trees. Emerald-spotted Doves (*Chalcopelia afra*) and Cape Turtle-Doves (*Turtur capicola*) were very plentiful, the ery of the former being one of the most characteristic sounds on the Zambesi—" hoo hoo hoo-hoo" in a gradually descending scale. Round the blossoms of some of the larger trees (especially one known as the Mzingula, the botanical name of which I have been unable to obtain) hovered numbers of Scarlet-chested Sun-birds (*Cinnyris gutturalis*), while flocks of small birds of the genera *Quelea* and *Layonosticta* flew from bush to bush.

On the 8th of September we moved up about seven miles above the Falls to a place called Livingstone, on the north bank of the Zambesi, where the river is broad and open and not obstructed by islands, at least for a mile or two. Here there seemed to be a good many more birds, and we added considerably to our list and collection. One of the commonest species was the Stripe-chested Weaver-bird (*Ploceipasser pectoralis*), which was to be seen everywhere, and was very noisy and quarrelsome. These birds were usually in small parties about the mimosa-thorns, and were a good deal on the ground; they appeared to be thinking of breeding, and everywhere their untidy nests—woven of dry grass-stems, with the ends sticking out in all directions—were to be seen, a good many generally occupying each thorn-tree.

A dead mule lying a short distance from the settlement had attracted a number of Vultures; these, after gorging themselves, settled in the neighbouring trees to rest and digest. We were fortunate enough to secure two of them for the Museum, and they proved to be very interesting, being respectively Rüppell's Vulture (*Gyps rueppelli*) and the Hooded Vulture (*Necrosyrtes pileatus*), species hitherto unrepresented in our collections at Cape Town.

When on the river one day, unfortunately without my gun, I was much surprised to see a Gull seated on a rock : I identified it with tolerable certainty as *Larus cirrhocephalus*; unfortunately, neither Drury nor I saw it again.

We stopped two days at Livingstone, and then proceeded to a camp which had been made for us about seven miles further up the river, where the Sinde, a small tributary from the north, joins the main stream. Here the river is much broken up by islands, and there seemed to be good collecting-ground, so we began our work in earnest.

By far the commonest bush-bird at this spot was the Black-

capped Bulbul (*Pycnonotus layardi*), with its cheerful piping note and active habits, a number being usually found together haunting the higher branches of the trees in the neighbourhood of the river. Jardine's Babbler (*Crateropus jardinii*) was also a noticeable bird, noisy and restless, with a harsh chattering note, reminding one of the well-known Indian "Sat-bhai" (*Crateropus canorus*); while the Black Tit (*Parus xanthostomus*) was commonly seen climbing about the topmost branches of the taller trees, and getting into all sorts of queer attitudes, like the English Tits and the Cape Mouse-birds.

Among the Birds-of-Prey the Kite (*Milvus migruns*) was very frequently seen rolling round in the air, easily recognised by its long forked tail, while the Bateleur (*Helotarsus* ecaudatus) could also be clearly identified by its short tail. Occasionally, too, I saw the magnificent Fish-Eagle (*Haliaëtus vocifer*), while one example of that somewhat rare bird, Wahlberg's Eagle (*Aquila wahlbergi*), was obtained. One morning, on a neighbouring island, Drury was fortunate enough to meet with a family of the large Eagle-Owl (*Bubo lacteus*), consisting of a pair and one young bird fully fledged; the female—which was carrying in her claws the greater part of the carcase of a Zambesi Genet (*Genetta rubiginosa*)—and the young bird were secured and skinned.

Game-birds were not very numerous: a few Guinea-fowls were seen, but were very wary and difficult to approach; the prevailing Partridge was *Pternistes swainsoni*, while the only Knorhaan seen and secured was a female *Otis melanogaster*.

I saw one example of that rare bird Seebohm's Courser (*Rhinoptilus seebohmi*) on the way up from Livingstone to the Sinde, but unfortunately my gun had been left behind with a boy at the time.

Apart from the Duikers and Snake-birds, the "Hadadah" (Hagedashia hagedash) was one of the commonest birds about the Zambesi; it was often to be seen standing about on the islands in mid-stream, and when disturbed made off with a loud ery somewhat resembling "a-a-ah." Hammerkops (*Scopus umbretta*) were also very common, and at a distance were not easily distinguished from the Hadadahs.

After staying eight days in our camp we returned to Livingstone, where I left Drury for a few days more, and proceeded to Bulawayo.

A day was spent in making an excursion to the Khami ruins, about fourteen miles from Bulawayo; these are probably of similar origin to those of Zimbabwe, which we subsequently visited, but are not in so good a state of preservation. Except for a flock of Guinea-fowls and a pair of Coqui Francolins noticed on our way back, very few birds were observed. Another two days were devoted to the World's View, where Mr. Rhodes's grave is situated, on the top of a smooth granite kopje in the Matoppo Hills; but here, too, I was somewhat disappointed in the number of birds. The large Whitenecked Raven (*Corvultur albicollis*) was very numerous, however, about the hotel; it was exceedingly tame and familiar, and appeared to be living on scraps picked up near the kitchen door. In no other part of Africa have I seen this species so abundant and so tame.

Running about among the rocks I also observed the Whiteshouldered Bush-Chat (*Thannolæa cinnamomeiventris*), a species that I had never before met with, while Drongos and Kites were just as numerous as about the Falls.

Mr. Marshall Hole, whose house in the suburbs of Bulawayo I visited, has a large aviary containing a number of seed-eating birds; among these I was very much astonished to see a pair of Cut-throat Weaver-birds (*Amadina fasciata*), which I understood from him had been caught locally. This species, so far as I am aware, has never before been found south of the Zambesi, and is, therefore, new to our fauna. According to Reichenow (Vögel Afrikas, iii. p. 147), it has not been recorded in the east south of Dar-es-Salaam in German East Africa.

Leaving Bulawayo on the 28th of September, we proceeded by rail and road to Zimbabwe, in order to see the ruins of the great temple and hill-fort, the true history of which

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is still shrouded in mystery. We travelled hurriedly, and had no opportunity of collecting and little of observing birds. Except for a flock of Brom-Vogels (*Bucorax caffer*), marching in a stately manner across an open flat, and a pair of Black Ducks (*Anus sparsa*), flushed when crossing the Tokwe River, there was little of interest from an ornithological point of view. From Zimbabwe we travelled back to Cape Town, making short stoppages at Serowe (the capital of the Beehuana chief Khama) and at Kimberley.

The following is a list of the birds observed at the Vietoria Falls or in the immediate neighbourhood. Examples of all of them, except those marked with an asterisk, were seeured for the South-African Museum :—

Hyphantornis auricapillus. ---- jamesoni. Ploceipasser pectoralis. Lagonosticta brunneiceps. Hyphargus harterti. Estrilda angolensis. Amadina fasciata. Quelea quelea. Vidua principalis. Passer diffusus. Serinus icterus. Emberiza flaviventris. Fringillaria tahapisi. Anthus pyrrhonotus. ----- rufulus. Motacilla vidua. Cinnyris mariquensis. - gutturalis. Zosterops anderssoni. Parus xanthostomus. Nilaus brubru. Telephonus senegalus. - australis. Dryoscopus cubla. ---- guttatus. Laniarius sulphureipectus. Sigmodus tricolor. Prionops talacoma. Crateropus jardinii. SER. VIII.-VOL. V.

Pvenonotus lavardi. Chlorocichla occidentalis. Cisticola erythrops. ----- chiniana. Saxicola falkensteini. Erythropygia zambesiana. Muscicapa cærulescens. Pachyprora molitor. Terpsiphone perspicillata. Dicrurus afer. Rhinopomastus cyanomelas. Coracias caudatus. ----- mossambicus. Melittophagus meridionalis. ----- bullockoides. Merops nubicoides. Cervle rudis. *____ maxima. Corvthornis evanostigma. Halcyon orientalis. Colins erythromelon. Lophoceros melanoleucus. ----- erythrorhynchus. Campothera bennetti. Lybius torquatus. Trachyphonus cafer. Centropus senegalensis. ----- superciliosus. Schizorhis concolor. 3

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*Numida coronata.
Limnocorax niger.
*Podica petersi.
Otis melanogaster.
*Larus cirrhocephalus.
*Lobivanellus lateralis.
Hoplopterus armatus.
Totanus hypoleucus.
—— glareola.
*Anastomus lamelligerus.
Scopus umbretta.
*Herodias alba.
*Hagedashia hagedash.
Butorides atricapilla.
Phalacrocorax africanus.
*Plotus levaillanti.
*Chenalopex ægyptiacus.

X.—Notices of recent Ornithological Publications.

1. ' Annals of Scottish Natural History.'

[The Annals of Scottish Natural History. Nos. 51 & 52, July and October 1904.]

Mr. T. G. Laidlaw's report on the movements and occurrences of birds in Scotland during 1903 is commenced in the first and ended in the second of these numbers. It is to be regretted that a falling off should again be noticeable in the returns from the lighthouses on the east coast between the Bell Rock and the Orkneys; but, on the other hand, those from inland stations are in excess of any previous record. Mr. N. B. Kinnear has some notes on the avifauna of the Loch Arkaig district. In Dr. T. Edmonston Saxby's remarks on the occurrences of birds in Shetland we note the first record of the Hawfinch from that group of islands : and a footnote (which should refer the reader to p. 187 and not to p. 179) indicates that an example of this range-extending species struck the lantern at the Skerryvore lighthouse, which lies to the south-west of Tiree, in the Hebrides. An editorial complaint is made respecting the wholesale taking of the eggs of the Great Skua, no fewer than sixty having been received by a person in Orkney "from one of the Shetland stations" [presumably Foula].